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? DS

| Set | Items | Description |
|-----|---------|--|
| S1 | 975802 | ((MEDIA(1W)ACCESS???) (1W)CONTROL? ?) OR MAC? ? |
| S2 | 167528 | (LAYER? ?(2N)(TWO OR SECOND OR 2 OR 2ND OR NEXT)) OR L2 OR L()2 |
| S3 | 1917 | S1(15N)S2 |
| S4 | 70691 | S1(5N){NETWORK? OR DISTRIBUTED() (MEDIUM OR MEDIA OR SYSTEM OR COMMUNICAT? OR TRANSMIT???? OR TRANSMISSION? ? OR TRANSFER-?) OR LAN? ? OR WAN? ? OR INTRANET? ? OR EXTRANET? ? OR INTERNET OR NODE? ? OR SERVER? ? OR NAMESPACE? ? OR NAME()SPACE? ? OR DOMAIN? ?} |
| S5 | 7862199 | (OUTPUT? OR BROADCAST? OR PROLIFERAT? OR UPLOAD? OR TRANSMIT? OR TRANSMISSION? ? OR SEND? OR SENT OR TRANSFER? OR ROUTE OR ROUTING OR FORWARD?) (10N) (LEARN? OR FEEDBACK? OR FEED()BACK? OR RESPOND? OR RESPONSE? ? OR COMMENT OR COMMENTS OR REMARK OR REMARKS OR ANSWER? ? OR STATEMENT? ? OR REPL??? OR RATE? ? OR RATING OR SCORE? ? OR SCORING OR GRADE? ? OR GRADING) |
| S6 | 1133444 | S1 OR S2 |
| S7 | 86592 | S6(5N){NETWORK? OR DISTRIBUTED() (MEDIUM OR MEDIA OR SYSTEM OR COMMUNICAT? OR TRANSMIT???? OR TRANSMISSION? ? OR TRANSFER- |

```

        ?) OR LAN? ? OR WAN? ? OR INTRANET? ? OR EXTRANET? ? OR INT-
        ERNET OR NODE? ? OR SERVER? ? OR NAMESPACE? ? OR NAME()SPACE?
        ? OR DOMAIN? ?)
S8      663   S4(30N)S5
S9      336   RD (unique items)
S10     269   S9 AND PY=1963:2004
S11     625   S3(3N)(ADDRES? OR ID OR IDS OR IDENTIFIER? ? OR IDENTIFICA-
        TION? ? OR ADDRESS?? OR POINTER? ? OR CODE OR CODES OR NUMBE-
        R? ? OR LOCATION? ? OR TAG? ? OR REFERENCE? ? OR INDEX?? OR I-
        NDICES)
S12      4    S11(30N)S10
S13     70691 S4(30N)S7
S14      116  S13(30N)S11
S15      84   RD (unique items)
S16     123   S13(100N)S11
S17      90   RD (unique items)
S18      70   S17 AND PY=1963:2004
S19      70   RD (unique items)
S20     75664 S6(5N)(NETWORK? OR DISTRIBUTED() (MEDIUM OR MEDIA OR SYSTEM
        OR COMMUNICAT? OR TRANSMIT???? OR TRANSMISSION? ? OR TRANSFER-
        ?) OR LAN? ? OR WAN? ? OR NODE? ? OR SERVER? ? OR NAMESPACE?
        ? OR NAME()SPACE? ? OR DOMAIN? ?)
S21     60675 S20(30N)S4
S22      114  S21(30N)S11
S23      83   RD (unique items)
S24      64   S23 AND PY=1963:2004

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?

Subject summary

? T/ 3,K/ ALL

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/1 (Item 1 from file: 15)

DIALOG(R) File 15: ABI/Inform(R)

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06289924

11349472

BAY NETWORKS DEBUTS LAYER 3 SWITCHING SOLUTION

Anonymous

Broadband Networking News v7n7 pp: 1

Apr 1, 1997

ISSN: 1059-0544 Journal Code: BRDB

Word Count: 915

Text:

...traffic. Bay defines layer 3 switching as the ability to forward packets based on a **network** layer address instead of the **media access control (MAC) address**. According to the company, its switch delivers low latencies and wire-speed switching at **layer 2 (L2)** and **layer 3 (L3)**, and forwards IP and IPX packets at approximately 1 million packets per second...

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/2 (Item 2 from file: 15)

DIALOG(R) File 15: ABI/Inform(R)

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06206830

33612531

Teaching IP new tricks: VLANs, QoS, and other advanced LAN protocols

Goldberg, Lee

Electronic Design v46n20 pp: 48

Sep 1, 1998

ISSN: 0013-4872 Journal Code: STEL

Word Count: 2675

Text:

...printer, or other device. Besides requiring network elements to maintain large routing tables, reliance on **layer-2 MAC addresses** makes it hard for **LAN** managers to reconfigure the network each time equipment is moved around a building or campus...

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/3 (Item 3 from file: 15)

DIALOG(R) File 15: ABI/Inform(R)

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02608019

372742401

Filters on routers: The price of performance

Newman, David

Network World v20n28 pp: 35

Jul 14, 2003

ISSN: 0887-7661 Journal Code: NWW

Word Count: 4365

Text:

...is a superset of the TOS field, All routers except Tasman's also filter on **Layer 2** criteria such as Ethernet **media access control addresses** and virtual **LAN** IDs.

All routers also filter on Layer 4 criteria such as TCP/User Datagram Protocol...

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/4 (Item 4 from file: 15)

DIALOG(R) File 15: ABI/Inform(R)

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02489614

236320431

Cool tools

Shaw, Keith

Network World v19n45 pp: 50

Nov 11, 2002

ISSN: 0887-7661 Journal Code: NWW

Word Count: 593

Text:

...data is not malicious, D-Link says. Transmissions can be filtered for content based on **media access control address**, **IP address** and **domain** name. VPN passthrough support is provided for IP Security **Layer 2** Tunneling Protocol and Point-to-Point Tunneling Protocol sessions. The router also supports 64-, 128...

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/5 (Item 5 from file: 15)

DIALOG(R) File 15: ABI/Inform(R)

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02385374

134377181

What's in your wiring closet?

Hochmuth, Phil

Network World v19n27 pp: 13-14

Jul 8, 2002

ISSN: 0887-7661 Journal Code: NWW

Word Count: 1016

Text:

...gear and Layer 3 software upgrades targeted for wiring closets.

The switches in most vendors' **Layer 2** to Layer 4 LAN edge portfolios break down as follows:

* Pure **Layer 2**: The long-standard Ethernet connection for nonrouted **networks** that use **media access control address** to move traffic.

* Layer 3 and Layer 4 "aware": **Layer 2** switches with added software or silicon that lets the switch look into and make use...

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/6 (Item 6 from file: 15)
DIALOG(R) File 15: ABI/Inform(R)
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02149256 69271761
Improving e-business server availability

Hernandez, Rich
Computer Technology Review v21n2 pp: 28
Feb 2001
ISSN: 0278-9647 Journal Code: CTN
Word Count: 1409

Text:

...simple algorithm, but it guarantees that the traffic load is equally distributed across all the **network** links while minimizing CPU processing.

MAC Address Algorithm. An alternative to the round robin technique is the use of the **MAC**, or **Layer 2, address**. This algorithm communicates with the **MAC** to check for errors and identify the NIC. All frames reach the destination in order...

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/7 (Item 7 from file: 15)
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02106599 65160686
High availability's dark side

Snyder, Joel
Network World v17n50 pp: 84
Dec 11, 2000
ISSN: 0887-7661 Journal Code: NWW
Word Count: 761

Text:

...to make more than one system look like a single box.- one IP address, one **media access control** address. Unfortunately, the growth of **LAN** switching power has complicated the lives of high-availability products tremendously.

The difficulty comes when you connect high-availability VPN systems to a single **LAN Layer 2** or **Layer 3** switch. **LAN** switches don't like to see the same **MAC address** on multiple ports - that's a network loop, and one of the ports has to...

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/8 (Item 8 from file: 15)
DIALOG(R) File 15: ABI/Inform(R)
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01961144 46981339
A pair of premium policy makers

Conover, Joel
Informationweek n764 pp: 154-156
Dec 6, 1999
ISSN: 8750-6874 Journal Code: IWK

Word Count: 1087

Text:

...on external events (implemented through a software API). The product doesn't dig deeply into **Layer 2** protocol information such as **Media Access Control address** or 802.1Q virtual **LAN** tags for conditions.

The product has nearly as many roles on Cisco router platforms as...

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/9 (Item 9 from file: 15)

DIALOG(R)File 15: ABI/Inform(R)

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01779459

04-30450

Quick, easy solution to bandwidth woes with services to boot

Correia, Edward J

Computer Reseller News n829 pp: 41, 44

Feb 15, 1999

ISSN: 0893-8377 Journal Code: CRN

Word Count: 634

Abstract:

...Layer 3 switches is beginning to fill the channel, and these devices not only segment **network** traffic based on **MAC address** as **L2** products do, but move up the OSI model to Layer 3, where routing takes place...

Text:

...Layer 3 switches is beginning to fill the channel, and these devices not only segment **network** traffic based on **MAC address** as **L2** products do, but move up the OSI model to Layer 3, where routing takes place...

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/10 (Item 10 from file: 15)

DIALOG(R)File 15: ABI/Inform(R)

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01683837

03-34827

Multilayer switches must battle hype

Trowbridge, Dave

Computer Technology Review v18n7 pp: 1, 12+

Jul 1998

ISSN: 0278-9647 Journal Code: CTN

Word Count: 1924

Text:

...with this problem was bridging, which segments Ethernet LANs into semi-independent subnetworks called collision **domains** by learning the **Media Access Control** (MAC) address of each end station and only forwarding packets destined for a different subnetwork... divided into logical user groups called subnets determined by the administrator. VLANs are basically a **Layer 2** technology, but switching virtual hubs can segment VLANs according to port, **MAC address**, **network address** (moving them into some Layer 3 processing), or IP multicast group, and, unlike traditional switched...

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/11 (Item 11 from file: 15)

DIALOG(R)File 15: ABI/Inform(R)

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01523604

01-74592

Multilayer switching steps up

DeNoia, Lynn

Informationweek n651 pp: 118-122

Oct 6, 1997

ISSN: 8750-6874 Journal Code: IWK

Word Count: 1448

Text:

...includes which classes of service are offered, what congestion-control mechanisms are included, and whether **LAN** emulation services are supported.

MAC address table size: This is an indicator of scalability, how large a network can be served, and how much information can be cached locally. For **Layer 2** devices, this means the **number** of **Layer 2 Media Access Control** **addresses** that can be stored per port, module, or unit. For Layer 3 devices, this governs...

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/12 (Item 12 from file: 15)

DIALOG(R)File 15: ABI/Inform(R)

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01387873

00-38860

Cabletron versus Cisco: Evaluating network architectures

Axner, David

Telecommunications (Americas Edition) v31n2 pp: 33-38

Feb 1997

ISSN: 0278-4831 Journal Code: TEC

Word Count: 3334

Text:

...each switch in the network to learn and create a table of the addresses (both **MAC** and **network** layer addresses) of the attached end stations. The Auto User Registration feature considerably reduces setup... destinations. It is based on network layer (Layer 3) addresses, which are initially resolved to **Layer 2 MAC** addresses as in a router. The resolved **MAC** layer destination **address** is used by the SmartSwitches to pass a LAN packet from its origin to destination... upgraded version of this software, expected in first quarter 1997, will support VLAN assignments by **MAC** or IP address. With **network** layer VLANs, Cisco maps subnet addresses to VLAN groups. A switch will associate the endstation...

...SFVN implementation gives users the flexibility to set up VLANs based on switch port number, **MAC** address, **network** protocol and/or address, or application. No other vendor provides such flexibility. Cisco now supports...

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/13 (Item 13 from file: 15)

DIALOG(R)File 15: ABI/Inform(R)

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01232248 98-81643
RMON2 delivers standards-based seven-layer network monitoring

DeBolle, Ben
Network World v13n24 pp: 41
Jun 10, 1996
ISSN: 0887-7661 Journal Code: NWW
Word Count: 637

Abstract:

...Protocol to provide traffic analysis and troubleshooting of switched internetworks. Other RMON2 enhancements include: 1. **address** mapping for indicating **media access control**-to-**network layer address** bindings, 2. Protocol Directory and Distribution groups for displaying selected higher layer protocols and related statistics, 3...

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/14 (Item 14 from file: 15)
DIALOG(R) File 15: ABI/Inform(R)
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01123283 97-72677
Publisher gets the scoop on ATM-based VLANs

Duffy, Jim
Network World v12n46 pp: 8
Nov 13, 1995
ISSN: 0887-7661 Journal Code: NWW
Word Count: 734

Text:

...are logically connected via drag-and-drop software commands, regardless of the endstations' physical location. **Media access control (MAC)** and **network** layer addresses of endstations do not change when they are moved from segment to segment...

...as private branch exchanges.

Of the three VLAN configuration options available -- defining segments by port, **Layer 2 MAC address** or Layer 3 **network** address -- Phoenix Newspapers will opt for Layer 3 due to its ability to limit the...

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/15 (Item 15 from file: 15)
DIALOG(R) File 15: ABI/Inform(R)
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01028584 96-77977
SNA battle royal

Guruge, Anura
Network World v12n18 pp: 34-36
May 1, 1995
ISSN: 0887-7661 Journal Code: NWW
Word Count: 2571

Abstract:

...is its ability to dynamically locate SNA/APPN or NETBIOS destinations using the destination's **Layer 2 media access control address**. RFC 1490's **networking** overhead is minimal compared to that of DLSw and Cisco's DLSw+. In addition to...

Dialog eLink:

USPTO Full Text Retrieval Options

24/3,K/16 (Item 16 from file: 15)

DIALOG(R)File 15: ABI/Inform(R)

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00986557 96-35950

Performance penalties

Saunders, Stephen

Data Communications v24n3 pp: 94-96

Mar 1995

ISSN: 0363-6399 Journal Code: DCM

Abstract:

...The packet-handling method that involves the least amount of processing is to look up **media access control (MAC)** addresses, a **Layer 2** function. For this reason, **Layer 2** switches that use **MAC addresses** to form virtual **LANs** can sometimes offer high performance levels with very low latencies. Even so, there is simply no way to send traffic from a **Layer 2** switch through a **network**-layer router and maintain switched Ethernet performance levels.

24/3,K/17 (Item 1 from file: 9)

DIALOG(R)File 9: Business & Industry(R)

(c) 2010 Gale/Cengage. All rights reserved.

01378696 Supplier Number: 24048495 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Multilayer Switching Steps Up -- Growing links and greater dependence on networks breed new products

(As network managers find themselves pressed to link workgroups and data centers with building networks, they need to evaluate how best to use the multilayer switching products flooding the market)

Information Week , p 118

October 06, 1997

Document Type: Journal ISSN: 8750-6874 (United States)

Language: English Record Type: Fulltext

Word Count: 1404 (USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...supportincludes which classes of service are offered, what congestion-control mechanisms are included, and whether **LAN** emulation services are supported.

- **MAC** address table size:This is an indicator of scalability, how large a network can be served, and how much information can be cached locally. For **Layer 2** devices, this means the number of **Layer 2 Media Access Control addresses** that can be stored per port, module, or unit. For Layer 3 devices, this governs...

24/3,K/18 (Item 1 from file: 810)

DIALOG(R)File 810: Business Wire

(c) 1999 Business Wire . All rights reserved.

0688301 BW1130

CI SCO SYSTEMS 2 : Cisco Provides New Network Services for the Catalyst 5000 Family

April 07, 1997

Byline: Business Editors/Computer Writers

...trails. Appropriate
firewall services are also available via access filters that can be
established at **Layer 2 MAC addresses**
and/or Layer 3 **network**
addresses.

Policy Management

To ensure consistent operation of new campus intranet services,
new policy management...

24/3,K/19 (Item 1 from file: 647)

DIALOG(R)File 647: UBM Computer Fulltext

(c) 2010 UBM, LLC. All rights reserved.

01205827 **CMP Accession Number:** IWK19991206S0061

A Pair Of Premium Policy Makers - Cisco Systems Qos Policy Manager 1.1 And User Registration Tool 1.2 (Beta)

Joel Conover, Network Computing

INFORMATIONWEEK , 1999 , n 764 , PG154

Publication Date: 991206

Journal Code: IWK **Language:** English

Record Type: Fulltext

Section Heading: Infrastructure

Word Count: 1053

, 1999 , v

Text:

...on external events (implemented through a software API). The product
doesn't dig deeply into **Layer 2** protocol information such as
Media Access Control address or 802.1Q virtual
LAN tags for conditions.

The product has nearly as many roles on Cisco router platforms as...

24/3,K/20 (Item 2 from file: 647)

DIALOG(R)File 647: UBM Computer Fulltext

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01191920 **CMP Accession Number:** NWC19990517S0029

Preparing Your Network for IP Multicasting

Eric A. Hall

NETWORK COMPUTING , 1999 , n 1010 , PG121

Publication Date: 990517

Journal Code: NWC **Language:** English

Record Type: Fulltext

Section Heading: Workshops - Network Services

Word Count: 1199

, 1999 , v

Text:

...the most prickly: IP packets are processed and delivered according to
the local system's **Layer 2** topology **addressing** and
framing services. In addition, a **network** adapter will process only
the **MAC**-layer frames that contain either the local system's hardware
address or the network's...

24/3,K/21 (Item 3 from file: 647)

DIALOG(R)File 647: UBM Computer Fulltext

(c) 2010 UBM, LLC. All rights reserved.

01184659 **CMP Accession Number:** CRN19990215S0038

Need For Speed Sparks Boom In Gigabit Ethernet Switches: Quick, easy solution to bandwidth woes with services to boot

Edward J. Correia
COMPUTER RESELLER NEWS , 1999 , n 829 , PG41
Publication Date: 990215
Journal Code: CRN **Language:** English
Record Type: Fulltext
Section Heading: CRN Test Center
Word Count: 648
, 1999 , v

Text:
...Layer 3 switches is beginning to fill the channel, and these devices not only segment **network** traffic based on **MAC address** as **L2** products do, but move up the OSI model to Layer 3, where routing takes place...

24/3,K/22 (Item 4 from file: 647)
DIALOG(R)File 647: UBM Computer Fulltext
(c) 2010 UBM, LLC. All rights reserved.

01155173 **CMP Accession Number:** EET19980309S0080
Communications Software - Znyx RAINlink provides trunking for Ethernet

Loring Wirbel
ELECTRONIC ENGINEERING TIMES , 1998 , n 997 , PG66
Publication Date: 980309
Journal Code: EET **Language:** English
Record Type: Fulltext
Section Heading: Design
Word Count: 282
, 1998 , v

Text:
...redundant paths between servers, switches and desktop computers. Since there's no need for a **server** to relearn **Layer 2 MAC addresses**, link failures can be detected and corrected in as little as 500 milliseconds.
Znyx engineers...

24/3,K/23 (Item 5 from file: 647)
DIALOG(R)File 647: UBM Computer Fulltext
(c) 2010 UBM, LLC. All rights reserved.

01140785 **CMP Accession Number:** IWK19971006S0059
Multilayer Switching Steps Up - Growing links and greater dependence on networks breed new products

Lynn DeNoia
INFORMATIONWEEK , 1997 , n 651 , PG118
Publication Date: 971006
Journal Code: IWK **Language:** English
Record Type: Fulltext
Section Heading: Technology Buyers Guide:Switches & Routers
Word Count: 1452
, 1997 , v

Text:
...support includes which classes of service are offered, what congestion-control mechanisms are included, and whether **LAN** emulation services are supported.
- **MAC** address table size: This is an indicator of scalability, how large a network can be served, and how much information can be cached locally. For **Layer 2** devices, this means the **number** of **Layer 2 Media Access Control addresses** that can be stored per port, module, or unit. For Layer 3 devices, this governs...

24/3,K/24 (Item 1 from file: 674)
DIALOG(R)File 674: Computer News Fulltext

(c) 2006 IDG Communications. All rights reserved.

107318

featured players

Byline: david newman

Journal: Network World **Page Number:** 40

Publication Date: July 14, 2003

Word Count: 865 **Line Count:** 84

Publication Year: 2003

Text:

...is a superset of the TOS field. All routers except Tasman's also filter on **Layer 2** criteria such as Ethernet **media access control addresses** and virtual **LAN** IDs. All routers also filter on Layer 4 criteria such as TCP/User Datagram Protocol...

24/3,K/25 (Item 2 from file: 674)

DIALOG(R) File 674: Computer News Fulltext

(c) 2006 IDG Communications. All rights reserved.

089710

High availability's dark side

Journal: Network World **Page Number:** 84

Publication Date: December 11, 2000

Word Count: 763 **Line Count:** 68

Publication Year: 2000

Text:

...to make more than one system look like a single box: one IP address, one **media access control** address. Unfortunately, the growth of **LAN** switching power has complicated the lives of high-availability products tremendously. The difficulty comes when you connect high-availability VPN systems to a single **LAN Layer 2** or **Layer 3** switch. **LAN** switches don't like to see the same **MAC address** on multiple ports --- that's a network loop, and one of the ports has to...

24/3,K/26 (Item 1 from file: 696)

DIALOG(R) File 696: DIALOG Telecom. Newsletters

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00663586

CISCO SUPES UP NEW SONET ACCESS PRODUCT

FIBER OPTICS NEWS

April 5, 1999 **Vol.:** 19 **Issue:** 14 **Document Type:** NEWSLETTER

Publisher: PHILLIPS BUSINESS INFORMATION

Language: ENGLISH **Word Count:** 535 **Record Type:** FULLTEXT

(c) PHILLIPS PUBLISHING INTERNATIONAL All Rts. Reserv.

Text:

...3303 can perform Layer 3, or Internet protocol-based routing. This is more efficient than **Layer 2** routing, which operates at the **MAC address** level. In **Layer 2** routing, when a **server** looks up a **MAC address** and it is not on the LAN, the packets are automatically forwarded out onto the...

1999

24/3,K/27 (Item 1 from file: 275)
DIALOG(R)File 275: Gale Group Computer DB(TM)
(c) 2010 Gale/Cengage. All rights reserved.

02775158 **Supplier Number: 112448829 (Use Format 7 Or 9 For FULL TEXT)**
Vol P: is your network ready? There is plenty to consider, including the cabling plant, when switching to IP telephony.(Voice Networks)

Higbie, Carrie
Communications News , 41 , 1 , 38(2)
Jan , 2004
ISSN: 0010-3632
Language: English **Record Type:** Fulltext
Word Count: 1206 **Line Count:** 00100
...Layer 2-type switches, IEEE has developed two standards (802.1p and 802.1q) to **address** QoS.
A **Layer 2** 802.1p-compliant switch has the ability within the **MAC** layer to group **LAN** packets according to their traffic class. Of the eight classes that network managers map to...

20040101

24/3,K/28 (Item 2 from file: 275)
DIALOG(R)File 275: Gale Group Computer DB(TM)
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02619470 **Supplier Number: 87774391 (Use Format 7 Or 9 For FULL TEXT)**
The state of the art in locally distributed Web-server systems.

Cardellini, Valeria; Casalicchio, Emiliano; Colajanni, Michele; Yu, Philip S.
ACM Computing Surveys , 34 , 2 , 263(49)
June , 2002
ISSN: 0360-0300
Language: English **Record Type:** Fulltext; Abstract
Word Count: 27802 **Line Count:** 02278
...Address Resolution Protocol (ARP) mechanism. The Web switch forwards an inbound packet to the target **server** by writing the **server MAC address** in the **layer-2** destination **address** and retransmitting the frame on the common LAN segment. This operation does not require any...otherwise, it is discarded.
Since the same VIP address is shared by all the server **nodes**, request routing occurs at the MAC layer. Two MAC address assignments to the server nodes...and the port in the TCP/IP packet. Unlike the solution adopted for the unique **MAC** address mechanism, here each **server** retains its unique built-in **MAC** address. This is resolved to the specific IP address of the server that is used...In these systems, the switch forwards packets destined to the Web cluster to a selected **server** by using its **MAC** address on the **LAN**, without modifying the TCP/IP headers. This is possible because all the server nodes share...Springer-Verlag, Heidelberg, 71-80.
VAIDYA, S. AND CHRISTENSEN, K. 2001. A single system image **server** cluster using duplicated **MAC** and IP addresses. In Proceedings of the IEEE 26th Conference on Local Computer Networks (Tampa ...

20020601

24/3,K/29 (Item 3 from file: 275)
DIALOG(R)File 275: Gale Group Computer DB(TM)
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02375763 **Supplier Number: 59629448 (Use Format 7 Or 9 For FULL TEXT)**
Will Layer 3 switches bring end to VLANs?(Technology Information)

Miles, J.B.
Government Computer News , 19 , 3 , 36
Feb 7 , 2000
ISSN: 0738-4300
Language: English **Record Type:** Fulltext
Word Count: 171 **Line Count:** 00017

...or across an entire campus comprising users with common interests by linking them according to **media access control addresses**, IP **addresses**, **network** protocols or even the specific port **numbers** of a **Layer 2** switch.

To the extent that VLANs eliminate network bottlenecks by simplifying traffic flow, they are...

20000207

24/3,K/30 (Item 4 from file: 275)
DIALOG(R)File 275: Gale Group Computer DB(TM)
(c) 2010 Gale/Cengage. All rights reserved.

02355696 **Supplier Number: 58044444 (Use Format 7 Or 9 For FULL TEXT)**
A Pair Of Premium Policy Makers -- Cisco Systems Qos Policy Manager 1.1 And User Registration Tool 1.2 (Beta).(network management software, Orchestream Enterprise Edition 2.0 also reviewed)(Software Review)(Evaluation)

Conover, Joel
InformationWeek , 154
Dec 6 , 1999

Document Type: Evaluation
ISSN: 8750-6874

Language: English **Record Type:** Fulltext; Abstract

Word Count: 1134 **Line Count:** 00096

...on external events (implemented through a software API). The product doesn't dig deeply into **Layer 2** protocol information such as

Media Access Control address or 802.1Q virtual **LAN** tags for conditions.

The product has nearly as many roles on Cisco router platforms as...

19991206

24/3,K/31 (Item 5 from file: 275)
DIALOG(R)File 275: Gale Group Computer DB(TM)
(c) 2010 Gale/Cengage. All rights reserved.

02263945 **Supplier Number: 19271724 (Use Format 7 Or 9 For FULL TEXT)**
JETLAN is Doppler radar for your network. (Jaguar Communications' network traffic analysis software) (Software Review)(Evaluation)

Backman, Dan
Network Computing , v8 , n6 , p48(2)
April 1 , 1997

Document Type: Evaluation
ISSN: 1046-4468

Language: English **Record Type:** Fulltext; Abstract

Word Count: 1002 **Line Count:** 00083

...be a useful security measure.

Since the autodiscovery utility runs at the Ethernet (OSI Level 2) **layer**, JETLAN labels **nodes** with their **Media**

Access Control (MAC) address instead of IP

addresses or Domain Name System (DNS) names. Even though it listens to Novell's service advertising protocol, IPX SAP, and correctly names Novell servers, all other **nodes** are labeled with their **MAC** addresses. JETLAN makes an educated guess about the type of equipment represented by each node...

19970401

24/3,K/32 (Item 6 from file: 275)
DIALOG(R)File 275: Gale Group Computer DB(TM)
(c) 2010 Gale/Cengage. All rights reserved.

02162507 **Supplier Number: 20500625**
Switching and routing, all in one. (Bay Networks Accelar 1200 Routing Switch) (Hardware Review)(Evaluation)

Parnell, Tere
LAN Times , v15 , n8 , p50(1)
April 13 , 1998
Document Type: Evaluation
ISSN: 1040-5917
Language: English **Record Type:** Abstract

Abstract: ...that can afford it. It uses special ASIC technology to provide Layer 3 switching, mapping **network addresses** to **media- access-control (MAC) addresses**, while continuing to support standard **Layer 2** functions. One unique feature is the Silicon Switch Fabric (SSF) module, which builds the switch ...

Abstract:
19980413

24/3,K/33 (Item 7 from file: 275)
DIALOG(R)File 275: Gale Group Computer DB(TM)
(c) 2010 Gale/Cengage. All rights reserved.

02096898 **Supplier Number:** 19724277 (Use Format 7 Or 9 For FULL TEXT)
VLANs Can Help Address Year 2000 Problem - Datapro Exec.

Newsbytes , pNEW09040037
Sep 4 , 1997
Language: English **Record Type:** Fulltext
Word Count: 728 **Line Count:** 00059

...can be time-consuming, according to Smith.

Another type of VLAN, which is based on **MAC**-layer grouping, requires that all **address** resolution is at **Layer 2**. GUIs make it possible for **network** managers to see easily just what, and who, is in which VLAN. VLANs based on **MAC** addresses enable **network** managers to move a workstation to a different physical location on the network and have...

19970904

24/3,K/34 (Item 8 from file: 275)
DIALOG(R)File 275: Gale Group Computer DB(TM)
(c) 2010 Gale/Cengage. All rights reserved.

02087800 **Supplier Number:** 19609302 (Use Format 7 Or 9 For FULL TEXT)
LANs become virtual. (overview of virtual LANs) (Technology Information)

Held, Gilbert
Network VAR , v5 , n7 , p40(5)
July , 1997
ISSN: 1082-8818
Language: English **Record Type:** Fulltext; Abstract
Word Count: 2554 **Line Count:** 00202

...VLANs

Moving up the OSI model, you arrive at the Data-link layer. In a **LAN** environment, you can use **MAC** addresses to form layer 2 VLANs; the MAC address for each workstation is assigned to...

...hexadecimal characters. Stations with MAC addresses A, B, C, D, and J form a broadcast **domain** associated with VLAN1; stations with **MAC** addresses E, F, G, H, I, and K are in the second broadcast domain, which...

...can track station movements. Unfortunately, many times people are remiss in keeping a list of **network** users and their **MAC** addresses. This can result in a considerable amount of work to initially set up a layer 2 VLAN.

LAYER 3 VLANs

Moving up to the Network layer, as you might expect, lets you to...

...stations on the network 192.26.31.xx are assigned to VLAN2. Similar to a **MAC** layer VLAN, a **Network** layer VLAN also automatically tracks station moves. This can be accomplished based on such Network...

19970700

24/3,K/35 (Item 9 from file: 275)
DIALOG(R)File 275: Gale Group Computer DB(TM)
(c) 2010 Gale/Cengage. All rights reserved.

02074143 **Supplier Number:** 19516666 (Use Format 7 Or 9 For FULL TEXT)
Flipping the switch. (IP switching technology) (Technology Information)

Schultz, Keith
Computer Shopper , v17 , n7 , p556(3)
July , 1997
ISSN: 0886-0556

Language: English **Record Type:** Fulltext; Abstract

Word Count: 2236 **Line Count:** 00168

...between two ports in the switch in order for the packet to reach its destination. **Layer 2** of the OSI model describes the communications protocol that contains the physical **address** (**MAC address**) of each **network** device. Also known as the data-link **layer**, **Layer 2** is responsible for providing Ethernet bridges that the switch needs in order to send a...

19970700

24/3,K/36 (Item 10 from file: 275)
DIALOG(R)File 275: Gale Group Computer DB(TM)
(c) 2010 Gale/Cengage. All rights reserved.

02041345 **Supplier Number:** 19129066 (Use Format 7 Or 9 For FULL TEXT)
Cabletron versus Cisco: evaluating network architectures. (Cabletron Systems, Cisco Systems) (Company Business and Marketing)

Axner, David
Telecommunications , v31 , n2 , p33(4)
Feb , 1997
ISSN: 0278-4831

Language: English **Record Type:** Fulltext; Abstract

Word Count: 3574 **Line Count:** 00298

...each switch in the network to learn and create a table of the addresses (both **MAC** and **network** layer addresses) of the attached end stations. The Auto User Registration feature considerably reduces setup... destinations. It is based on network layer (Layer 3) addresses, which are initially resolved to **Layer 2** **MAC** addresses as in a router. The resolved **MAC** layer destination **address** is used by the SmartSwitches to pass a LAN packet from its origin to destination... upgraded version of this software, expected in first quarter 1997, will support VLAN assignments by **MAC** or IP address. With **network** layer VLANs, Cisco maps subnet addresses to VLAN groups. A switch will associate the endstation...

...SFVN implementation gives users the flexibility to set up VLANs based on switch port number, **MAC** address, **network** protocol and/or address, or application. No other vendor provides such flexibility. Cisco now supports...

19970200

24/3,K/37 (Item 11 from file: 275)
DIALOG(R)File 275: Gale Group Computer DB(TM)
(c) 2010 Gale/Cengage. All rights reserved.

01814468 **Supplier Number:** 17203548 (Use Format 7 Or 9 For FULL TEXT)
Switching hub strategies.

Addelson, Roger; Jones, Loren
STACKS , v3 , n3 , p39(8)
March , 1995
ISSN: 1070-8596

Language: English **Record Type:** Fulltext; Abstract

Word Count: 4635 **Line Count:** 00391

...Instead of broadcasting every packet to all ports, the switch builds a table of the **Media Access Control** (**MAC**)

addresses of all **nodes** connected to each port on the switch. It then looks at the Ethernet address of...addressing, then each logical network becomes an IP subnet. Since the switch functions as a **MAC**-layer bridge, the entire **network** it switches is a single logical network, or IP subnet. An IP subnet is limited...LANs are also supported within the switch, allowing network managers to assign ports to specific **LANs**. Up to 6,000 **MAC** addresses are supported, with support for 10,000 addresses expected soon. Per-port aging, a...

19950300

24/3,K/38 (Item 12 from file: 275)
DIALOG(R) File 275: Gale Group Computer DB(TM)
(c) 2010 Gale/Cengage. All rights reserved.

01766271 **Supplier Number: 16719470 (Use Format 7 Or 9 For FULL TEXT)**
Micom router integrates voice and data. (NetRunner Integration Router family from Micom Communications consists of four models)(Brief Article)(Product Announcement)

Lardear, Jim
MIDRANGE Systems , v8 , n4 , p12(1)
Feb 24 , 1995
Document Type: Product Announcement
ISSN: 1041-8237
Language: ENGLISH **Record Type:** FULLTEXT
Word Count: 487 **Line Count:** 00039

...effort and cost associated with the setup and maintenance of routers by self-learning all **network addresses**.

By using **MAC Layer 2** Auto-Routing, EasyRouter automatically ages the addresses of deleted devices out of the tables. When a newly attached network device first transmits on the **LAN**, its **Layer 2** address is added to the table.

EasyRouter uses ARP (for TCP/IP) and SAP/RIP...

19950224

24/3,K/39 (Item 13 from file: 275)
DIALOG(R) File 275: Gale Group Computer DB(TM)
(c) 2010 Gale/Cengage. All rights reserved.

01696708 **Supplier Number: 16197586 (Use Format 7 Or 9 For FULL TEXT)**
Looking for trouble: today's range of testers and analyzers can troubleshoot even the farthest reaches of your network. (includes a related article on the Internet's SNMP-based Remote Monitoring, or RMON, specification) (Buyers Guide)

Carr, Jim
LAN Computing , v5 , n8 , p37(5)
August , 1994
Document Type: Buyers Guide
ISSN: 1055-1808
Language: ENGLISH **Record Type:** FULLTEXT; ABSTRACT
Word Count: 2677 **Line Count:** 00216

...the new offering will give AG Group customers the ability to place software probes on **Macs** residing on network segments or "satellites," and then collect historical data about each network segment ...RMON MIB is divided into 10 groups that provide a variety of media-access layer (**MAC**) data about **network** segments, originally only on Ethernet, and more recently on rings on Token Ring LANs.

These...

...their management budget.

MAC-ONLY WEAKNESS

The major weakness of RMON is that it supports **network** monitoring only to the **MAC layer (Layer 2)** of the OSI **reference** model. This means that basic RMON devices can present statistics only for aggregate network traffic...

19940800

24/3,K/40 (Item 1 from file: 621)
DIALOG(R) File 621: Gale Group New Prod. Annou. (R)
(c) 2010 Gale/Cengage. All rights reserved.

04018728 **Supplier Number: 131627731 (USE FORMAT 7 FOR FULLTEXT)**
Independent Tests Demonstrate That Foundry Networks' Metro Ethernet Solution Supports Key 'Carrier-Class' Requirements with High Availability, Quality of Service and Security; BT Exact's Rigorous Lab Testing Confirms Features and Performance of Foundry's Solution For Providing E-Line and E-LAN Metro Ethernet Services.

PR Newswire , p NA
Dec 2 , 2003
Language: English **Record Type:** Fulltext
Document Type: Newswire ; Trade
Word Count: 1287

-
...traffic primarily to be handled at the Media Access Control (MAC) Level. Implementing security at **Layer 2** requires special handling of **network** data. Foundry offers several mechanisms for restricting **network** access based on **Layer 2** Ethernet information including, **MAC Address** Port security which intelligently prevents unauthorized access to the **network** and **MAC** address filtering. In addition to those verified by BT Exact, Foundry safeguards also include hardware...

20031202

24/3,K/41 (Item 1 from file: 636)
DIALOG(R) File 636: Gale Group Newsletter DB(TM)
(c) 2010 Gale/Cengage. All rights reserved.

05803294 **Supplier Number: 117610256 (USE FORMAT 7 FOR FULLTEXT)**

Japan's new Kyotango City deploys e-Government solution from Nortel Networks; High-capacity 'community intranet' offers sophisticated electronic information services.

M2 Presswire , p NA
June 3 , 2004
Language: English **Record Type:** Fulltext
Document Type: Newswire ; Trade
Word Count: 1215

-
...terms of security, which is extremely important, we especially value the IEEE 802.1x and **MAC address** security functions that Nortel **Networks BayStack* Layer 2** switches offer."
"This Kyotango City **network** is one of the major end-to-end e-Government deployments in Japan and a...

20040603

24/3,K/42 (Item 2 from file: 636)
DIALOG(R) File 636: Gale Group Newsletter DB(TM)
(c) 2010 Gale/Cengage. All rights reserved.

03689600 **Supplier Number: 47958442 (USE FORMAT 7 FOR FULLTEXT)**

VLANs Can Help Address Year 2000 Problem - Datapro Exec 09/ 04/ 97

Malapitan, Jennifer B.
Newsbytes , p N/A
Sept 4 , 1997
Language: English **Record Type:** Fulltext
Document Type: Newswire ; General Trade
Word Count: 677

-
...can be time-consuming, according to Smith.
Another type of VLAN, which is based on **MAC**-layer grouping, requires that all **address** resolution is at **Layer 2**. GUIs make it possible for **network** managers to see easily just what, and who, is in which VLAN. VLANs based on **MAC** addresses enable **network** managers to move a workstation to a different physical

location on the network and have...

19970904

24/3,K/43 (Item 1 from file: 16)
DIALOG(R) File 16: Gale Group PROMT(R)
(c) 2010 Gale/Cengage. All rights reserved.

09928955 **Supplier Number:** 89008516 (USE FORMAT 7 FOR FULLTEXT)

What's in your wiring closet?; New switches spark debate over using advanced technologies to the desktop.

Hochmuth, Phil
Network World , p 13
July 8 , 2002

Language: English **Record Type:** Fulltext
Document Type: Magazine/Journal ; General Trade
Word Count: 1047

-
...gear and Layer 3 software upgrades targeted for wiring closets.
The switches in most vendors' **Layer 2** to Layer 4 LAN edge
portfolios break down as follows:
* Pure **Layer 2**: The long-standard Ethernet connection
for nonrouted **networks** that use **media access**
control address to move traffic.
* Layer 3 and Layer 4 "aware": **Layer 2** switches with
added software or silicon that lets the switch look into and make use...

20020708

24/3,K/44 (Item 2 from file: 16)
DIALOG(R) File 16: Gale Group PROMT(R)
(c) 2010 Gale/Cengage. All rights reserved.

08225759 **Supplier Number:** 68153374 (USE FORMAT 7 FOR FULLTEXT)

High availability's dark side.(Company Business and Marketing)

Snyder, Joel
Network World , p 84
Dec 11 , 2000

Language: English **Record Type:** Fulltext
Document Type: Magazine/Journal ; General Trade
Word Count: 830

-
...to make more than one system look like a single box: one IP address, one
media access control address. Unfortunately, the
growth of **LAN** switching power has complicated the lives of
high-availability products tremendously.
The difficulty comes when you connect high-availability VPN systems
to a single **LAN Layer 2** or **Layer 3** switch.
LAN switches don't like to see the same **MAC address** on
multiple ports --- that's a network loop, and one of the ports has to...

20001211

24/3,K/45 (Item 3 from file: 16)
DIALOG(R) File 16: Gale Group PROMT(R)
(c) 2010 Gale/Cengage. All rights reserved.

06344781 **Supplier Number:** 54649306 (USE FORMAT 7 FOR FULLTEXT)

Preparing Your Network for IP Multicasting.(hardware, software, topology
issues)(Internet/ Web/ Online Service Information)

Hall, Eric A.
Network Computing , p 121(1)
May 17 , 1999

Language: English **Record Type:** Fulltext
Document Type: Magazine/Journal ; Trade

Word Count: 1240

-

...the most prickly: IP packets are processed and delivered according to the local system's **Layer 2** topology **addressing** and framing services. In addition, a **network** adapter will process only the **MAC**-layer frames that contain either the local system's hardware address or the network's...

19990517

24/3,K/46 (Item 4 from file: 16)

DIALOG(R)File 16: Gale Group PROMT(R)

(c) 2010 Gale/Cengage. All rights reserved.

06133486 **Supplier Number:** 53882846 (USE FORMAT 7 FOR FULLTEXT)

Need For Speed Sparks Boom In Gigabit Ethernet Switches: Quick, easy solution to bandwidth woes with services to boot.(Compaq SW5450, Lucent Technologies Cajun P550)(Hardware Review)(Evaluation)

J. Correia, Edward

Computer Reseller News , p 41(1)

Feb 15 , 1999

Language: English **Record Type:** Fulltext

Article Type: Evaluation

Document Type: Magazine/Journal ; Trade

Word Count: 644

-

...Layer 3 switches is beginning to fill the channel, and these devices not only segment **network** traffic based on **MAC address** as **L2** products do, but move up the OSI model to Layer 3, where routing takes place...

19990215

24/3,K/47 (Item 5 from file: 16)

DIALOG(R)File 16: Gale Group PROMT(R)

(c) 2010 Gale/Cengage. All rights reserved.

05506665 **Supplier Number:** 48344274 (USE FORMAT 7 FOR FULLTEXT)

Communications Software -- Znyx RAINlink provides trunking for Ethernet

Wirbel, Loring

Electronic Engineering Times , p 66

March 9 , 1998

Language: English **Record Type:** Fulltext

Document Type: Magazine/Journal ; Trade

Word Count: 284

-

...redundant paths between servers, switches and desktop computers. Since there's no need for a **server** to relearn **Layer 2 MAC addresses**, link failures can be detected and corrected in as little as 500 milliseconds.
Znyx engineers...

19980309

24/3,K/48 (Item 6 from file: 16)

DIALOG(R)File 16: Gale Group PROMT(R)

(c) 2010 Gale/Cengage. All rights reserved.

05273248 **Supplier Number:** 48033429 (USE FORMAT 7 FOR FULLTEXT)

Multilayer Switching Steps Up -- Growing links and greater dependence on networks breed new products

DeNoia, Lynn

InformationWeek , p 118

Oct 6 , 1997

Language: English **Record Type:** Fulltext

Document Type: Magazine/Journal; Tabloid ; General Trade

Word Count: 1440

-

...support includes which classes of service are offered, what congestion-control mechanisms are included, and whether **LAN** emulation services are supported.

- **MAC** address table size: This is an indicator of scalability, how large a network can be served, and how much information can be cached locally. For **Layer 2** devices, this means the number of **Layer 2 Media Access Control addresses** that can be stored per port, module, or unit. For Layer 3 devices, this governs...

19971006

24/3,K/49 (Item 7 from file: 16)

DIALOG(R) File 16: Gale Group PROMT(R)

(c) 2010 Gale/Cengage. All rights reserved.

04943100 **Supplier Number:** 47265202 (USE FORMAT 7 FOR FULLTEXT)

JETLAN Is Doppler Radar For Your Network

Backman, Dan

Network Computing , p 48

April 1 , 1997

Language: English **Record Type:** Fulltext

Document Type: Magazine/Journal ; Trade

Word Count: 942

-

...be a useful security measure.

Since the autodiscovery utility runs at the Ethernet (OSI Level 2) **layer**, JETLAN labels **nodes** with their **Media Access Control (MAC) address** instead of IP

addresses or Domain Name System (DNS) names. Even though it listens to Novell's service advertising protocol, IPX SAP, and correctly names Novell servers, all other **nodes** are labeled with their **MAC** addresses. JETLAN makes an educated guess about the type of equipment represented by each node...

19970401

24/3,K/50 (Item 8 from file: 16)

DIALOG(R) File 16: Gale Group PROMT(R)

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04519101 **Supplier Number:** 46638907 (USE FORMAT 7 FOR FULLTEXT)

Collage 530 provides an on-ramp to ATM backbone

InfoWorld , p N10

August 19 , 1996

Language: English **Record Type:** Fulltext

Document Type: Magazine/Journal ; Trade

Word Count: 649

-

...end transport of Ethernet (and Token Ring, where applicable) frames over an ATM cell-switching **network**. LANE provides **Layer 2** (

Media Access Control (MAC)/Logical Link Control) Ethernet-to-ATM **address** resolution. Because **LANE** works at **Layer 2**, it will work with all Layer 3 protocols such as IPX or IP.

Collage 530...

19960819

24/3,K/51 (Item 1 from file: 148)

DIALOG(R) File 148: Gale Group Trade & Industry DB

(c) 2010 Gale/Cengage. All rights reserved.

14321666 **Supplier Number:** 83248024 (USE FORMAT 7 OR 9 FOR FULL TEXT)
MPLS' newest application: Layer-2 VPNs: MPLS is neither simple nor a sure thing, but there's lots of heavy betting that it'll succeed. Here's a status report.

Petrosky, Mary
Business Communications Review , 32 , 2 , 29(5)
Feb , 2002
ISSN: 0162-3885
Language: English
Record Type: Fulltext
Word Count: 3130 **Line Count:** 00276
...VPN (L2 VPN), the provider's equipment forwards customer data based on information in the **Layer 2** headers, such as a frame relay data link connection **identifier** (DLCI), an Ethernet **MAC address** or 802.1q virtual **LAN** (VLAN) **tag**.
 L2 VPNs are multiprotocol in nature, so they can support both IP and non-IP traffic...

20020201

24/3,K/52 (Item 2 from file: 148)
DIALOG(R)File 148: Gale Group Trade & Industry DB
(c) 2010 Gale/Cengage. All rights reserved.

14253070 **Supplier Number:** 82375878 (USE FORMAT 7 OR 9 FOR FULL TEXT)
IP-PBXs: Ready and waiting: Next-gen enterprise voice systems are bigger, better and more numerous than they were a year ago.(Buyers Guide)

Mier, Edwin E.; Percy, Kenneth M.; Brown, Kevin D.
Business Communications Review , 32 , 1 , 29(12)
Jan , 2002
Document Type: Buyers Guide
ISSN: 0162-3885
Language: English
Record Type: Fulltext
Word Count: 8483 **Line Count:** 00896
...attacks. Security enhancements like intrusion detection sub-systems, for example, can be added to the **Layer-2/Layer-3** infrastructure underlying the IP-telephony system. Another effective defense was to statically map the **MAC addresses** of **LAN** devices to specific switch ports, which precludes unauthorized devices from accessing the network.
 Conclusion
 Reviewing...

20020101

24/3,K/53 (Item 3 from file: 148)
DIALOG(R)File 148: Gale Group Trade & Industry DB
(c) 2010 Gale/Cengage. All rights reserved.

12798308 **Supplier Number:** 66884677 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Recipe for success: how fast table look-up makes high-speed communications possible.(Buyers Guide)

Cravotta, Nicholas
EDN , 45 , 21 , 45
Oct 12 , 2000
Document Type: Buyers Guide
ISSN: 0012-7515
Language: English
Record Type: Fulltext
Word Count: 4320 **Line Count:** 00318
...an application offers, an intelligent router might use tables based on egress port, VLAN (virtual-**LAN**) connection (**Layer 2**), **MAC** (media-access-controller) base address (**Layer 2**), **IP address** (**Layer 3**), **VPN** (virtual private **network** (**Layer 3**), tunnel (**Layer 3**), **QoS** (quality of service, **Layer 4**), or **CoS** (class of...

20001012

24/3,K/54 (Item 4 from file: 148)
DIALOG(R)File 148: Gale Group Trade & Industry DB
(c) 2010 Gale/Cengage. All rights reserved.

11588741 **Supplier Number:** 55805329 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Quality of service in the LAN.(local area networks)

Passmore, David
Business Communications Review , 29 , 6 , 16(2)
June , 1999
ISSN: 0162-3885

Language: English

Record Type: Fulltext; Abstract

Word Count: 1750 **Line Count:** 00140

...actual contents of the packet (e.g., a specific URL).

LAN Prioritization with VLANs

Some **Layer 2** switches can prioritize traffic based upon switch port or source **MAC address**, and then use this as input into the scheduling algorithm. Since many vendors have already developed a mechanism for classifying traffic by switch port or **MAC address** - virtual **LANs** (VLANs) - it's only natural that **Layer 2** switches leverage this functionality. The 802.1p/802.1Q standards specify a VLAN header with...

19990601

24/3,K/55 (Item 5 from file: 148)
DIALOG(R)File 148: Gale Group Trade & Industry DB
(c) 2010 Gale/Cengage. All rights reserved.

10170827 **Supplier Number:** 20375444 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Communications Software -- Znyx RAINlink provides trunking for Ethernet.(Product Announcement)

Wirbel, Loring
Electronic Engineering Times , n996 , p66(1)
March 9 , 1998

Document Type: Product Announcement

ISSN: 0192-1541

Language: English

Record Type: Fulltext

Word Count: 301 **Line Count:** 00028

...redundant paths between servers, switches and desktop computers. Since there's

no need for a **server** to relearn **Layer 2**

MAC addresses, link failures can be

detected and corrected in as little as 500 milliseconds.

Znyx engineers...

19980309

24/3,K/56 (Item 6 from file: 148)
DIALOG(R)File 148: Gale Group Trade & Industry DB
(c) 2010 Gale/Cengage. All rights reserved.

09835786 **Supplier Number:** 19547839 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Route once, switch many. (switching and routing for local area networks)

Passmore, David
Business Communications Review , v27 , n4 , p20(2)
April , 1997
ISSN: 0162-3885

Language: English

Record Type: Fulltext; Abstract

Word Count: 1724 **Line Count:** 00141

...a "learning bridge." But they apply this concept to IP at Layer 3,

rather than **MAC addresses** at **Layer 2**.

All **LAN** switches really function as multiport bridges, monitoring LAN traffic to learn where specific workstations and...

19970400

24/3,K/57 (Item 7 from file: 148)

DIALOG(R)File 148: Gale Group Trade & Industry DB

(c) 2010 Gale/Cengage. All rights reserved.

09788020 **Supplier Number:** 19860096 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Multilayer switching steps up. (network switches)(includes directory)(Switches and Routers)(Buyers Guide)

DeNola, Lynn

InformationWeek , n651 , p118(4)

Oct 6 , 1997

Document Type: Buyers Guide

ISSN: 8750-6874

Language: English

Record Type: Fulltext; Abstract

Word Count: 1551 **Line Count:** 00129

...supportincludes which classes of service are offered, what congestion-control mechanisms are included, and whether **LAN** emulation services are supported.

- **MAC** address table size: This is an indicator of scalability, how large a network can be served, and how much information can be cached locally. For **Layer 2** devices, this means the **number** of **Layer 2 Media Access Control** **addresses** that can be stored per port, module, or unit. For Layer 3 devices, this governs...

19971006

24/3,K/58 (Item 8 from file: 148)

DIALOG(R)File 148: Gale Group Trade & Industry DB

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09325318 **Supplier Number:** 19099770 (USE FORMAT 7 OR 9 FOR FULL TEXT)

VLANs: can Layer 3 save the day. (virtual local area networks)

Morency, John; Winkler, Kathrin

Business Communications Review , v26 , n12 , p47(4)

Dec , 1996

ISSN: 0162-3885

Language: English

Record Type: Fulltext; Abstract

Word Count: 1751 **Line Count:** 00146

...the current crop of technologies and products.

A classic example is what's happening with **Layer 2** virtual **LANs**, which define membership in a **LAN** by end-station **MAC address**, switchport **ID** or a combination of the two. In single-switch configurations, they're relatively straightforward to ...

19961200

24/3,K/59 (Item 9 from file: 148)

DIALOG(R)File 148: Gale Group Trade & Industry DB

(c) 2010 Gale/Cengage. All rights reserved.

08892828 **Supplier Number:** 18599346

Collage 530 provides an on-ramp to ATM backbone. (Madge Networks Inc's Collage 530, 540 network switches) (Hardware Review)(Evaluation)

Symoens, Jeff

InfoWorld , v18 , n34 , pN10(1)

August 19 , 1996

Document Type: Evaluation

ISSN: 0199-6649

Language: English

Record Type: Fulltext; Abstract

Word Count: 697 **Line Count:** 00058

...end transport of Ethernet (and Token Ring, where applicable) frames over an ATM cell-switching **network**. LANE provides **Layer 2** (

Media Access Control (MAC)/Logical Link

Control) Ethernet-to-ATM **address** resolution. Because **LANE** works at **Layer 2**, it will work with all Layer 3 protocols such as IPX or IP.

Collage 530...

19960819

24/3,K/60 (Item 10 from file: 148)

DIALOG(R)File 148: Gale Group Trade & Industry DB

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07555574 **Supplier Number:** 16359220 (USE FORMAT 7 OR 9 FOR FULL TEXT)

TCP/IP and SNA: can they get along? (Transmission Control Protocol/ Internet Program; Systems Network Architecture)

Guruge, Anura

Business Communications Review , v24 , n10 , p33(8)

Oct , 1994

ISSN: 0162-3885

Language: ENGLISH

Record Type: FULLTEXT; ABSTRACT

Word Count: 3556 **Line Count:** 00289

...SNA traffic from having to be conveyed across the wide area network.

Local acknowledgment reduces **WAN** traffic and also eliminates

Layer 2 timeouts that are caused by delays within the **WAN**.

4. DLSw caches **MAC addresses** and NetBIOS "names" (e.g., Server Name) in a local directory, so it's not...

19941000

24/3,K/61 (Item 11 from file: 148)

DIALOG(R)File 148: Gale Group Trade & Industry DB

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07241912 **Supplier Number:** 15150975 (USE FORMAT 7 OR 9 FOR FULL TEXT)

IBM in internetworking: a progress report. (includes related article on IBM's network products)

Guruge, Anura

Business Communications Review , v24 , n4 , p25(7)

April , 1994

ISSN: 0162-3885

Language: ENGLISH

Record Type: FULLTEXT; ABSTRACT

Word Count: 3735 **Line Count:** 00302

...a token-ring LAN.

3. It performs local LLC-2 acknowledgment to preclude requiring that **Layer 2** acknowledgments be conveyed across a **WAN**.

4. It caches **MAC addresses** and NetBIOS names in a local directory, eliminating the need for repeated searches across the...

19940400

24/3,K/62 (Item 1 from file: 484)

DIALOG(R)File 484: Periodical Abs Plustext

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09670904 **Supplier Number:** 62807188 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Recipe for success: How fast table look-up makes high-speed communications possible

Cravotta, Nicholas

EDN (STED) , v45 n21 , p 45-54 , p. 6

Oct 12, 2000

ISSN: 0012-7515 **Journal Code:** STED

Document Type: Feature

Language: English

Record Type: Fulltext; Abstract

Word Count: 3968

2000

TEXT:

...an application offers, an intelligent router might use tables based on egress port, VLAN (virtual-**LAN**) connection (**Layer 2**), **MAC** (media-access-controller) base address (**Layer 2**), **IP address** (**Layer 3**), VPN (virtual private **network** (**Layer 3**), tunnel (**Layer 3**), QoS (quality of service, **Layer 4**), or CoS (class of...

24/3,K/63 (Item 2 from file: 484)

DIALOG(R)File 484: Periodical Abs Plustext

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09003136 **Supplier Number:** 528774751 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Vol P: Is your network ready?

Higbie, Carrie

Communications News (CNE) , v41 n1 , p 38-40

Jan 2004

ISSN: 0010-3632 **Journal Code:** CNE

Document Type: Feature

Language: English

Record Type: Fulltext; Abstract

Word Count: 1153

2004

TEXT:

...Layer 2-type switches, IEEE has developed two standards (802.1p and 802.1q) to **address** QoS.

A **Layer 2** 802.1p-compliant switch has the ability within the **MAC** layer to group **LAN** packets according to their traffic class. Of the eight classes that network managers map to...

24/3,K/64 (Item 1 from file: 613)

DIALOG(R)File 613: PR Newswire

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01078283 20031202SFTU019 (USE FORMAT 7 FOR FULLTEXT)

Independent Tests Demonstrate that Foundry Metro Ethernet

PR Newswire

Tuesday , December 2, 2003 07:01 EST

Journal Code: PR **Language:** ENGLISH **Record Type:** FULLTEXT **Document Type:** NEWSWIRE

Word Count: 1,314

2003

Text:

...traffic primarily to be handled at the Media Access Control (MAC) Level. Implementing security at **Layer 2** requires special handling of **network** data. Foundry offers several mechanisms for restricting **network** access based on **Layer 2** Ethernet information including, **MAC Address** Port security which intelligently prevents unauthorized access to the **network** and **MAC** address filtering. In addition to those verified by BT Exact, Foundry safeguards also include hardware...

?